

| Gene Name | Gene Description                                | FHS Sample           | Estimated Number | Unrelated or Family  | Project Status |
|-----------|---|----------------------|------------------|----------------------|----------------|
| ABC1      | ATP-binding cassette, sub-family A              | Offspring            | 1888             | Unrelated            | In-progress    |
| ACAD8     | Acyl-coenzyme A dehydrogenases family, member 8 | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| ACE       | Angiotensin I converting enzyme                 | Offspring and Cohort | 3197             | Unrelated and Family | Complete       |
| ACE       | Angiotensin I converting enzyme                 | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ACTC      | Actin, alpha, cardiac muscle                    | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ACTG1     | actin, gamma 1                                  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ADCY1     | Adenylate cyclase 1 (brain)                     | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ADCY2     | Adenylate cyclase 2 (brain)                     | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ADCY6     | Adenylate cyclase 6                             | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ADCY7     | adenylate cyclase 7                             | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ADCY9     | Adenylate cyclase 9                             | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ADD1      | Adducin 1 (alpha)                               | General Population   | 2016             | Unrelated            | In-progress    |
| ADD2      | Adducin 2 (beta) (b4 isoform)                   | General Population   | 2016             | Unrelated            | In-progress    |
| ADD3      | Adducin 3 (gamma)                               | General Population   | 2016             | Unrelated            | In-progress    |
| ADH1C     | Alcohol dehydrogenase (SNP:rs698)               | Offspring            | 1888             | Unrelated            | In-progress    |
| ADM       | Adrenomedulin                                   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ADRA1A    | adrenergic, alpha-1A-, receptor                 | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ADRA1B    | adrenergic, alpha-1B-, receptor                 | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ADRA1D    | adrenergic, alpha-1D-, receptor                 | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ADRA2A    | Adrenergic, alpha-2A-, receptor                 | Offspring            | 1888             | Unrelated            | Complete       |
| ADRA2B    | Adrenergic, alpha-2B-, receptor                 |                      |                  |                      | In-progress    |
| ADRB1     | adrenergic, beta-1-, receptor                   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ADRB2     | Adrenergic receptor, Beta-2                     | Offspring and Cohort | 3982             | Unrelated and Family | Complete       |
| ADRB2     | adrenergic, beta-2-, receptor, surface          | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ADRBK1    | adrenergic, beta, receptor kinase 1             | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |

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| ADRBK2    | adrenergic, beta, receptor kinase 2  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| AGL       | amylo-1, 6-glucosidase, 4-alpha-glucanotransferase (glycogen debranching enzyme) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| AGT       | Angiotensinogen  | Offspring and Cohort | 3291             | Unrelated and Family | Complete       |
| AGT       | angiotensinogen  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| AGTR1     | Angiotensin II receptor, type 1  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| AGTR2     | Angiotensin II receptor, type 2  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| AIG-1     | androgen-induced 1   | related family       | 1400             | Family               | In-progress    |
| AIG-1     | Androgen-induced protein   | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| AKT1      | v-akt murine thymoma viral oncogene homolog 1                                    | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| AKT2      | v-akt murine thymoma viral oncogene homolog 2                                    | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ALMS1     | Alstrom syndrome 1   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ALOX15    | Arachidonate 15-lipoxygenase   | Offspring            | 1888             | Unrelated            | In-progress    |
| ALS       | Aldosterone synthase   | Offspring and Cohort | 3982             | Unrelated and Family | Complete       |
| ANGPT1    | Angiopoietin 1   | Offspring            |                  |                      | Complete       |
| ANGPT2    | Angiopoietin 2   | Offspring            | 1888             | Unrelated            | In-progress    |
| ANKRD1    | ankyrin repeat domain 1 (cardiac muscle)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ANP       | Atrial natriuretic factor  | Offspring and Cohort | 3982             | Unrelated and Family | Complete       |
| ANXA1     | annexin A1   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ANXA2     | annexin A2   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| APJ       | Apelin receptor  | Offspring            | 1888             | Unrelated            | In-progress    |
| APLN      | Apelin ligand  | Offspring            | 1888             | Unrelated            | In-progress    |
| APLP2     | Amyloid beta prtein precursor-like protein 2                                     | Offspring and Cohort | 1441             | Family               | In-progress    |
| APM2      | adipose specific 2   | offspring            |                  | Family               | In-progress    |
| APOA1     | Apolipoprotein A-I   |                      |                  |                      | In-progress    |
| APOA1     | Apolipoprotein A-I   | Offspring            | 2408             | Unrelated and Family | Complete       |
| APOA4     | Apolipoprotein A-IV  |                      |                  |                      | In-progress    |
| APOA4     | Apolipoprotein A-IV  | Offspring            | 2517             | Unrelated and Family | Complete       |
| APOA5     | Apolipoprotein A-V   | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| APOC3     | Apolipoprotein C-III   |                      |                  |                      | In-progress    |

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| APOC3     | Apolipoprotein C-III   | Offspring            | 2485             | Unrelated and Family | Complete       |
| APOE      | Apolipoprotein E   | Offspring and Cohort | 4838             | Unrelated and Family | Complete       |
| ARHA      | Ras homolog gene family, member A (RhoA)                               | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ARRB1     | Arrestin beta 1  | Offspring            | 1920             | Unrelated            | In-progress    |
| ARRB2     | arrestin, beta 2   | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| AT3       | Antithrombin III   | Offspring            | 2096             | Unrelated and Family | In-progress    |
| ATF6      |  |                      |                  |                      | Complete       |
| ATP1A1    | ATPase, alpha 1  | Offspring            | 1855             | Unrelated            | In-progress    |
| ATP1A2    | ATPase, apha 2   | Offspring            | 1888             | Unrelated            | Complete       |
| AVP       | Arginine vasopressin   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| B3GAT1    | Beta- 1,3 glucuronyltransferase  | Offspring and Cohort | 1441             | Family               | In-progress    |
| BACE      | Beta-site APP-cleaving enzyme isoforms A-D                             | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| BAD       | BCL2-antagonist of cell death  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| BAX       | BCL2-associated X protein  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| BCL2      | B-cell CLL/lyphoma 2   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| BDKRB1    | Bradykinin receptor subtype B1   | Offspring and Cohort | 1866 & 1441      | Unrelated and Family | In-progress    |
| BDKRB2    | Bradykinin receptor subtype B2   | Offspring and Cohort | 1866 & 1441      | Unrelated and Family | In-progress    |
| BDNF      | brain-derived neurotrophic factor                                      | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| BGLAP     | Gamma carboxyglutamic acid   | Offspring            | 1888             | Unrelated            | In-progress    |
| BGN       | biglycan   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| BMP2      | Bone morphogenic protein 2   | Offspring            | 1888             | Unrelated            | In-progress    |
| BMP4      | Bone morphogenetic protein 4   | Offspring            |                  |                      | Complete       |
| BMP9      | growth differentiation factor 2  | Offspring            |                  | Family               | In-progress    |
| BMPR2     | Bone morphogenetic protein receptor, type II (serine/threonine kinase) | Offspring            |                  |                      | Complete       |
| CALM1     | calmodulin 1 (phophorylase kinase, delta)                              | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| CALM2     | Calmodulin 2   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| CALM3     | Calmodulin 3   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |

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| CAMK2G        | calcium/calmodulin-dependent protein kinase (CaM kinase) II gamma   | offspring            |                  | Family               | In-progress    |
| CASQ2         | calsequestrin 2 (cardiac muscle)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| CAT           | Catalase  | Offspring and Cohort | 1866 & 1441      | Unrelated and Family | In-progress    |
| CAT           | catalase  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| CAV3          | caveolin 3  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| CBS           | Cystathionine beta-synthase   | Offspring            |                  | Unrelated            | In-progress    |
| CCL2          | chemokine (C-C motif) ligand 2  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| CCR2          | Chemokine (C-C motif) receptor 2  | Offspring            | 1860             | Unrelated            | Complete       |
| CCR2          | Chemokine (C-C motif) receptor 2  | Offspring            | 1888             | Unrelated            | In-progress    |
| CCR5          | Chemokine (C-C motif) receptor 5  | Offspring            | 1838             | Unrelated            | Complete       |
| CCR8          | Chemokine (C-C motif) receptor 8  | Offspring            | 1860             | Unrelated            | Complete       |
| CD36          | CD36 antigen  | Offspring            | 1888             | Unrelated            | In-progress    |
| CD36L1        | thrombospondin receptor   |                      |                  |                      | In-progress    |
| CD36L1/SCARB1 | Scavenger receptor class B  | Offspring            | 1888             | Unrelated            | In-progress    |
| CETP          | Cholesteryl ester transfer protein  | Offspring            | 2916             | Unrelated and Family | Complete       |
| CFL1          | cofilin 1 (non-muscle)  | offspring and family | 1441 & 1863      | Unrelated and Family | In-progress    |
| CHPT1         | choline phosphotransferase 1  | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| CHRM1         | cholinergic receptor, muscarinic 1  | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| CHRN1         | cholinergic receptor, nicotinic, beta polypeptide 1 (muscle)  | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| CHRNE         | cholinergic receptor, nicotinic, epsilon polypeptide  | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| CHUK          | Inhibitor of nuclear factor kappa-B kinase alpha subunit (I kappa-B kinase alpha, or IkbKA; IKK-alpha, or IKKA) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| CLCN3         | Chloride channel 3  | Offspring            | 1888             | Unrelated            | In-progress    |
| CLCNKB        | Chloride channel Kb   | Offspring            |                  | Unrelated and Family | In-progress    |
| CNTF          | ciliary neurotrophic factor   | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |

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| COL1A1    | Collagen type I, alpha 1   | Offspring and Cohort | 1866 & 1441      | Unrelated and Family | In-progress    |
| COL1A1    | collagen, type 1, alpha 1  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| COL1A2    | collagen, type 1, alpha 2  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| COL3A1    | collagen, type III, alpha 1 (Ehlers-Danlos syndrome type IV, autosomal dominant) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| COL5A1    | collagen, type V, alpha 1  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| COL5A2    | collagen, type V, alpha 2  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| COX10     | COX10 homolog, cytochrome c oxidase assembly protein                             | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| CPT1A     | carnitine palmitoyltransferase 1A  |                      |                  | Family               | In-progress    |
| CREB1     | cAMP responsive element binding protein 1  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| CRHR1     | corticotropin releasing hormone receptor 1                                       | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| CSPG2     | chondroitin sulfate proteoglycan 2 (versican)                                    | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| CSX       | Nkx2.5   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| CTGF      | connective tissue growth factor  | related family       | 1400             | Family               | In-progress    |
| CX3CR1    | Fractalkine receptor ( CX3C chemokine receptor 1)                                | Offspring            | 1859             | Unrelated            | In-progress    |
| CXCR1     | CXC Chemokine Receptor 1   | Offspring            | 1888             | Unrelated            | In-progress    |
| CXCR2     | CXC Chemokine Receptor 2   | Offspring            | 1888             | Unrelated            | In-progress    |
| CYB561    | cytochrome b-561   | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| CYBA      | Cytochrome b-245 alpha polypeptide   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| CYP11B2   | Cytochrome P450, subfamily XIB (steroid 11-beta-hydroxylase), polypeptide 2      | Offspring            |                  | Unrelated and Family | In-progress    |
| CYP19     | Aromatase  | Offspring            | 1888             | Unrelated            | Complete (H)   |
| CYP2C8    | Arachidonate epoxigenase (EET-synthase)  | Offspring and Cohort | 1888 & 1441      | Family and Unrelated | In-progress    |
| CYP4A11   | Arachidonate hydroxylase (20-HETE synthase)                                      | Offspring            | 1888             | Unrelated            | In-progress    |
| CYP7      | Cholesterol 7alpha-hydroxylase   | Offspring            | 2330             | Unrelated and Family | Complete       |

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| DDC       | dopa decarboxylase (aromatic L-amino acid decarboxylase)                               | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| DDX6      | Homeobox   | Offspring and Cohort | 1441             | Family               | In-progress    |
| DELGEF    | Deafness locus associated putative guanin nucleotide exchange factor                   | Offspring            | 1920             | Unrelated            | In-progress    |
| DES       | desmin   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| DFNA5     | Deafness, autosomal dominant 5   | Offspring            | 195              | Unrelated            | Complete       |
| DGKE      | diacylglycerol kinase, epsilon   | offspring and family | 1441 & 1863      | Unrelated and Family | In-progress    |
| DMD       | dystrophin (muscular dystrophy, Duchenne and Becker types)                             | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| DNAJB9    | DnaJ (Hsp40) homolog, subfamily B, member 9  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| DNCL      | dyein, cytoplasmic, light polypeptide 1  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| DRD2      | Dopamine receptor D2   | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| DSP       | desmoplakin (DPI, DPII)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| DTR       | diphtheria toxin receptor (heparin-binding epidermal growth factor-like growth factor) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| EDL, LIPG | Lipase, endothelial  | Offspring            | 1888             | Unrelated            | In-progress    |
| EDN1      | Endothelin 1   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| EDNRA     | Endothelin receptor type A   | Offspring            | 1888             | Unrelated            | In-progress    |
| EDNRB     | Endothelin receptor type B   | Offspring            | 1888             | Unrelated            | In-progress    |
| EL        | endothelial lipase   | Offspring and Cohort | 1888 & 1441      |                      | In-progress    |
| ELN       | Elastin  | Offspring            |                  |                      | Complete       |
| ELN       | elastin (supravalvular aortic stenosis, Williams-Seuren syndrome)                      | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ENaCAlpha | Sodium channel, nonvoltage-gated 1, alpha  | Offspring            |                  | Unrelated and Family | In-progress    |
| ENaCGamma | Sodium channel, nonvoltage-gated 1, gamma  | Offspring            |                  | Unrelated and Family | In-progress    |
| ENG       | Endoglin   | Offspring            | 1888             | Unrelated            | In-progress    |
| EPHB4     | EphB4  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| EPIM      | Epimorphin   |                      |                  |                      | In-progress    |
| ERAP140   | estrogen receptor associated protein 140 kDa   | related family       | 1400             | Family               | In-progress    |
| ESR1      | Estrogen Receptor alpha  | Offspring            | 1888             | Unrelated            | Complete (H)   |

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| ESR1      | Estrogen receptor 1                                    | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| ESR2      | Estrogen Receptor beta                                 | Offspring            | 1888             | Unrelated            | Complete (H)   |
| F10       | Coagulation factor X                                   | Offspring            | 2096             | Unrelated and Family | In-progress    |
| F2        | Coagulation factor II (thrombin)                       | Offspring            | 2096             | Unrelated and Family | In-progress    |
| F2R       | Coagulation factor II (thrombin) receptor              | Offspring            | 2096             | Unrelated and Family | In-progress    |
| F3        | Coagulation factor III (thromboplastin, tissue factor) | Offspring            | 2096             | Unrelated and Family | In-progress    |
| F5        | Coagulation Factor V                                   | Offspring and Cohort | 3291             | Unrelated and Family | Complete       |
| F5        | Coagulation Factor V                                   |                      |                  |                      |                |
| F7        | Coagulation Factor VII                                 | Offspring and Cohort | 3291             | Unrelated and Family | Complete       |
| F7        | Coagulation Factor VII                                 | Offspring            | 2096             | Unrelated and Family | Complete       |
| FABP2     | Fatty Acid Binding Protein 2, intestinal               | Offspring            | 1684             | Unrelated and Family | Complete       |
| FABP7     | Fatty acid binding protein 7, brain                    | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| FBLN2     | fibulin 2  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| FBN1      | fibrillin 1 (Marfan syndrome)                          | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| FBN2      | fibrillin 2 (congenital contractural arachnodactyly)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| FEZ1      | Fasciculation and elongation protein zeta 1            | Offspring and Cohort | 1441             | Family               | In-progress    |
| FGA       | Fibrinogen, A alpha polypeptide                        | Offspring            | 2096             | Unrelated and Family | In-progress    |
| FGB       | Fibrinogen B beta polypeptide                          | Offspring and Cohort | 3291             | Unrelated and Family | Complete       |
| FGB       | Fibrinogen B beta polypeptide                          | Offspring            | 2096             | Unrelated and Family | Complete       |
| FGG       | Fibrinogen, gamma polypeptide                          | Offspring            | 2096             | Unrelated and Family | In-progress    |
| FHL1      | four and a half LIM domains 1                          | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| FHL2      | four and a half LIM domains 2                          | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| FHL3      | four and a half LIM domains 3                          | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| FLI1      | Friend leukemia virus intergration 1                   | Offspring and Cohort | 1441             | Family               | In-progress    |
| FLJ23467  |  |                      |                  |                      | Complete       |
| FOXC2     | forkhead box C2 (MFH-1, mesenchyme forkhead 1)         |                      |                  |                      | In-progress    |

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| FRAP1     | FK506 binding protein 12-rapamycin associated protein 1                                 | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| FSTL1     | follicle-stimulating-like 1   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| FURIN     | Furin   | Offspring            | 1888             | Unrelated            | In-progress    |
| FUT3      | Lewis Gene  | Offspring            | 1888             | Unrelated            | In-progress    |
| FUT3      | Lewis Gene  | Offspring            | 1888             | Unrelated            | In-progress    |
| FUT3      | Lewis Gene  | Offspring            | 1888             | Unrelated            | In-progress    |
| FYN       | FYN oncogene related to SRC FGR, YES  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| FZD10     | Frizzled 10   |                      |                  |                      | In-progress    |
| GABARAP   | GABA (A) receptor associated protein  | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| GATA4     | GATA binding protein 4  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| GBE1      | glucan (1,4-alpha-), branching enzyme, Ande   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| GDPT1     | Glucose-6-phosphatase, transport  | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| GJB2      | Gap junction protein, beta 2, 26kD (connexin 26)  | Offspring            | 183              | Unrelated            | Complete       |
| GLUD1     | glutamate dehydrogenase 1   | Offspring            |                  | Family               | In-progress    |
| GNAI1     | Guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 1 | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| GNAI2     | Guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 2 | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| GNAQ      | Guanine nucleotide binding protein (G protein), q polypeptide                           | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| GNAS      | GNAS complex locus  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| GNB3      | Guanine nucleotide binding protein (G protein), beta polypeptide 3                      | Offspring            | 1888             | Unrelated            | In-progress    |
| GP1BA     | Glycoprotein Ib (platelet), alpha polypeptide   | Offspring            | 2096             | Unrelated and Family | In-progress    |
| GP3A      | GpIbIIIa  | Offspring and Cohort |                  |                      | Complete       |
| GP9       | Glycoprotein IX (platelet)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| GPR44     | G protein-coupled receptor 44   | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| GPR51     | G protein-coupled receptor 51   | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| GPRK5     | G protein-coupled receptor kinase 5   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |

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| GRIK4     | Glutamate receptor ionotropic kainite-4  | Offspring and Cohort | 1441             | Family               | In-progress    |
| GRIN3A    | glutamate receptor, ionotropic, N-methyl-D-aspartate 3A  | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| GRM5      | glutamate receptor, metabotropic 5   | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| HDAC2     | histone deacetylase 2  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| HGH       | Human Growth Hormone   | Offspring and Cohort | 1248             | Family               | Complete       |
| HKI       | brain form hexokinase  | Offspring            |                  | Family               | In-progress    |
| HMOX1     | Heme oxygenase (decycling) 1   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| HNT       | Neurotrimin  | Offspring and Cohort | 1441             | Family               | In-progress    |
| HRAS      | v-Ha-ras Harvey rat sarcoma viral oncogene homolog   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| HRT3A/B   | Serotonin receptor 3A/3B   | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| HSD11B1   |  |                      |                  |                      | Complete       |
| HSGT1     | suppressor of S. cerevisiae gcr2   | Offspring            |                  | Family               | In-progress    |
| ICAM1     | intercellular adhesion molecule 1 (CD54), human rhinovirus receptor  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| IDE       | Insulin degrading enzyme   | Offspring            |                  | Unrelated and Family | Complete       |
| IGF1      | Insulin like growth factor 1 (somatomedin C)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| IGF1BP1   |  |                      |                  |                      | In-progress    |
| IGF2R     | Insulin-like growth factor 2 receptor  | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| IKBKB     | Inhibitor of nuclear factor kappa B kinase beta subunit (I-kappa-B-kinase beta, or IkbKB; IKK-beta, or IKKB) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| IKBKG     | NF-kappaB essential modulator (NEMO; IKK-gamma, or IKKG)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| IL1B      | Interleukin 1, beta  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |

| Gene Name           | Gene Description  | FHS Sample           | Estimated Number | Unrelated or Family  | Project Status |
|---------------------|---|----------------------|------------------|----------------------|----------------|
| IL6                 | Interleukin 6   | Offspring            | 1822             | Unrelated            | Complete       |
| IL6                 | Interleukin 6   | Offspring            | 1888             | Unrelated            | Complete       |
| IL6R                | Interleukin 6 receptor  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| IL6ST               | Interleukin 6 signal transducer (gp130, oncostatin M receptor)                    | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| IL8                 | Interleukin 8   | Offspring            | 1888             | Unrelated            | In-progress    |
| ir                  | intergenic region   | Offspring and Cohort | 1441             | Family               | In-progress    |
| ITGA2B              | Integrin, alpha 2b  | Offspring            | 2096             | Unrelated and Family | In-progress    |
| ITGB3               | Integrin, beta 3 (platelet glycoprotein IIIa, antigen CD61)                       | Offspring and Cohort | 3291             | Unrelated and Family | Complete       |
| KCNA1               | Potassium channel, member 1   | Offspring            | 1888             | Unrelated            | In-progress    |
| KCNA4               | Potassium voltage-gated channel, member 4   | Offspring            | 1888             | Unrelated            | In-progress    |
| KCNA5               | Potassium channel, member 5   | Offspring            | 1888             | Unrelated            | In-progress    |
| KCNE1               | potassium voltage-gated channel, Isk-related family, member 1 (LQT5)              | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| KCNE2               | potassium voltage-gated channel, Isk-related family, member 2                     | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| KCNH2               | potassium boltage-gated channel, subfamily H (eag-related), member 2              | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| KCNMA1              | Potassium channel, subfamily M, alpha 1   | Offspring            | 1888             | Unrelated            | In-progress    |
| KCNMA1 LocusID 3778 | potassium large conductance calcium-activated channel, subfamily M alpha member 1 | Offspring            | 1800             | Unrelated            | In-progress    |
| KCNMB1              | Potassium channel, subfamily M, beta 1  | Offspring            | 1888             | Unrelated            | In-progress    |
| KCNMB1 LocusID 3771 | potassium large conductance calcium-activated channel, subfamily M beta member 1  | Offspring            | 1800             | Unrelated            | In-progress    |
| KCNN3               | Potassium channel, subfamily N, member 3  | Offspring            | 1888             | Unrelated            | In-progress    |
| KCNQ1               | potassium voltage-gated channel, KQT -like subfamily, member 1                    | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| KIAA 0254           | Sorting Nexin 19  | Offspring and Cohort | 1441             | Family               | In-progress    |
| LAMP2               | lysosomal-associated membrane protein 2   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| LIFR                | Leukemia inhibitory factor receptor   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |

| Gene Name  | Gene Description   | FHS Sample           | Estimated Number | Unrelated or Family  | Project Status |
|------------|--|----------------------|------------------|----------------------|----------------|
| LIPC       |  |                      |                  |                      | In-progress    |
| LIPC       | Hepatic lipase   | Offspring            | 2667             | Unrelated and Family | Complete       |
| LMNA       | Lamin A/C  | Offspring            | 1800             | Unrelated            | Proposed       |
| LMNA       | lamin A/C  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| LMNA       | Lamin A/C  | Offspring            | 81               | Unrelated            | In-progress    |
| LOC 201859 | similar to family 4 cytochrome P450                          | Offspring and Cohort | 1441 & 1861      | Unrelated and Family | In-progress    |
| LOC 283431 | similar to Growth-arrest-specific protein 2 (GAS-2)          | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| LOC 285440 | similar to family 4 cytochrome P450                          | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| LOC 344057 | Unknown  | Offspring            | 1888             | Unrelated            | In-progress    |
| LOC 351338 | Unknown  | Offspring            | 1888             | Unrelated            | In-progress    |
| LOC 351339 | Unknown  | Offspring            | 1888             | Unrelated            | In-progress    |
| LOC 51083  | galanin-related peptide                                      | offspring and family | 1441 & 1863      | Unrelated and Family | In-progress    |
| LOC285746  | hypothetical protein, putative fatty acid binding protein    | related family       | 1400             | Family               | In-progress    |
| LOC338793  |  |                      |                  |                      | In-progress    |
| LOC92328   |  |                      |                  |                      | In-progress    |
| LOH11CR2A  | Loss of Heterozygosity 11                                    | Offspring and Cohort | 1441             | Family               | In-progress    |
| LOX1, OLR1 | Oxidized low density lipoprotein receptor 1                  | Offspring            | 1888             | Unrelated            | In-progress    |
| LPL        |  |                      |                  |                      | In-progress    |
| LPL        | Lipoprotein lipase   | Offspring and Cohort | 2546             | Unrelated and Family | Complete       |
| LRP11      | hypothetical protein with lipoprotein receptor motif (LDL-A) | related family       | 1400             | Family               | In-progress    |
| MAGP2      | microfibril-associated glycoprotein-2                        | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MAP2K1     | Mitogen-activated protein kinase kinase 1                    | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MAP2K4     | Mitogen-activated protein kinase kinase 4                    | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MAP2K5     | mitogen-activated protein kinase kinase 5                    | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MAP2K6     | Mitogen-activated protein kinase kinase 6                    | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MAPK1      | Mitogen-activated protein kinase 1                           | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |

| Gene Name  | Gene Description   | FHS Sample           | Estimated Number | Unrelated or Family  | Project Status |
|------------|--|----------------------|------------------|----------------------|----------------|
| MAPK14     | Mitogen-activated protein kinase 14  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MAPK8      | Mitogen-activated protein kinase 8   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MCP-1      | Monocyte chemoattractant protein 1   | Offspring            | 1888             | Unrelated            | complete       |
| MEF2A      | MADS box transcription enhancer factor 2, polypeptide A (myocyte enhancer factor 2A)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MEF2B      | MADS box transcription enhancer factor 2, polypeptide B (myocyte enhancer factor 2B)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MEF2C      | MADS box transcription enhancer factor 2, polypeptide B (myocyte enhancer factor 2C)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MEF2D      | MADS box transcription enhancer factor 2, polypeptide B (myocyte enhancer factor 2D)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MEOX1      | mesenchyme homeo box 1   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MGC29891   |  |                      |                  |                      | Complete       |
| MGP        | Matrix Gla protein   | Offspring            |                  |                      | Complete       |
| MIF        | Macrophage migration inhibitory factor   | Offspring            | 1888             | Unrelated            | In-progress    |
| MIP-1alpha | Macrophage inflammatory protein 1 alpha  | Offspring            | 1888             | Unrelated            | In-progress    |
| MLP        | MARCKS-like protein  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MLR        | Mineralocorticoid receptor   | Offspring and Cohort | 3982             | Unrelated and Family | Complete       |
| MMP13      | Matrix metalloproteinase 13  | Offspring            | 1888             | Unrelated            | In-progress    |
| MMP17      | matrix metalloproteinase   |                      |                  |                      | In-progress    |
| MMP2       | matrix metalloproteinase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MMP3       | Matrix metalloproteinase 3 (stromelysin 1, progelatinase)                              | Offspring            |                  |                      | Complete       |
| MMP9       | matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MODY1      |  |                      |                  |                      | In-progress    |
| MPO        | Myeloperoxidase  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MSR1       | Macrophage scavenger receptor 1  | Offspring            | 1888             | Unrelated            | In-progress    |

| Gene Name                | Gene Description  | FHS Sample           | Estimated Number | Unrelated or Family  | Project Status |
|--------------------------|---|----------------------|------------------|----------------------|----------------|
| MT1A                     | metallothionein 1A (functional)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MT2A                     | metallothionein 2A  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MTHFR                    | 5,10-methylenetetrahydrofolate reductase (NADPH)                                    | Offspring            | 2596             | Unrelated and Family | Complete       |
| MTP                      |   |                      |                  |                      | In-progress    |
| MTP                      | Microsomal triglyceride transfer protein  | Offspring            | 2510             | Unrelated and Family | Complete       |
| Multiple Candidate Genes | genotyping markers  | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| MYBPC3                   | Myosin binding protein C, Cardiac   | Offspring            | 1888 & 81        | Unrelated and Family | In-progress    |
| MYBPC3                   | myosin binding protein C, cardiac   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MYCD                     | myocardin   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MYH6                     | myosin, heavy polypeptide 6, cardiac muscle, alpha (cardiomyopathy, hypertrophic 1) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MYH7                     | Myosin, heavy polypeptide 7, cardiac muscle, beta                                   | Offspring            | 1888 & 81        | Unrelated and Family | In-progress    |
| MYH7                     | myosin, heavy polypeptide 7, cardiac muscle, beta                                   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MYL1                     | Myosin, light polypeptide 1, alkali; skeletal, fast                                 | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MYL2                     | Myosin, light polypeptide 2, regulatory, cardiac, slow                              | Offspring            | 1888 & 81        | Unrelated and Family | In-progress    |
| MYL2                     | Myosin, light polypeptide 2, regulatory, cardiac, slow                              | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MYL3                     | Myosin, light polypeptide 3, alkali; ventricular, skeletal, slow                    | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MYLK2                    | myosin light chain kinase 2, skeletal muscle  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| MYO7A                    | Myosin VIIA   | Offspring            | 1920             | Unrelated            | In-progress    |
| MYOG                     | myogenin (myogenic factor 4)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NAGS                     | N-acetylglutamate synthase  | offspring and family | 1441 & 1863      | Unrelated and Family | In-progress    |
| NC11                     | Sodium-chloride cotransporter   | Offspring and Cohort | 3982             | Unrelated and Family | Complete       |
| NC6                      | Thiazide-sensitive sodium chloride cotransporter                                    | Offspring and Cohort | 3982             | Unrelated and Family | Complete       |
| NCAM1                    | Neural cell adhesion molecule 1   | Offspring and Cohort | 1441             | Family               | In-progress    |
| NCCT                     | Solute carrier family 12  | Offspring            |                  | Unrelated and Family | In-progress    |

| Gene Name | Gene Description  | FHS Sample           | Estimated Number | Unrelated or Family  | Project Status |
|-----------|---|----------------------|------------------|----------------------|----------------|
| NDUFV1    | NADH dehydrogenase (ubiquinone) flavoprotein 1  | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| NES       | nestin  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NFATC4    | Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 4                 | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NFKB1     | Nuclear factor NF-kappa-B p105 subunit [Contains: Nuclear factor NF-kappa-B p50 subunit]. | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NFKBIA    | NF-kappaB inhibitor alpha (I-kappa-B-alpha, or IKBalpha)                                  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NFKBIB    | NF-kappaB inhibitor beta (I-kappa-B-beta, or IKBB)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NFKBIE    | NF-kappaB inhibitor epsilon (I-kappa-B-epsilon, or IKBE)                                  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NFRKB     | Nuclear factor related kappa b  | Offspring and Cohort | 1441             | Family               | In-progress    |
| NGFB      | Nerve growth factor, beta polypeptide   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NGFR      | Nerve growth factor receptor (TNFR superfamily, member 16)                                | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NHE3      | Sodium/hydrogen exchanger 3   | Offspring and Cohort | 3982             | Unrelated and Family | Complete       |
| NKA       | Neurokinin A  | Offspring and Cohort | 3982             | Unrelated and Family | Complete       |
| NKCC2     | Solute carrier family 12 (sodium/potassium/chloride transporters)                         | Offspring            |                  | Unrelated and Family | In-progress    |
| NKX2-5    | NK2 transcription factor related, locus 5 (Drosophila)                                    | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NMBR      | Neuromedin B Receptor   | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| NOS1      | nitric oxide synthase 1   |                      |                  |                      | In-progress    |
| NOS2A     | Nitric oxide synthase 2A  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NOS3      | Nitric oxide synthase 3 (endothelial cell)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NPPA      | atrial natriuretic peptide (ANP)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NPPB      | brain natriuretic peptide (BNP)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NPPB      | natriuretic peptide precursor type B  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NPPC      | Natriuretic peptide precursor C   | Offspring            | 1888             | Unrelated            | In-progress    |
| NPR1      | Natriuretic peptide receptor A/guanylate cyclase A  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |

| Gene Name | Gene Description   | FHS Sample           | Estimated Number | Unrelated or Family  | Project Status |
|-----------|--|----------------------|------------------|----------------------|----------------|
| NPR2      | Natriuretic peptide receptor B/guanylate cyclase B         | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NPR3      | Natriuretic peptide receptor C                             | Offspring            | 1888             | Unrelated            | In-progress    |
| NRBF-2    | nuclear receptor binding factor-2                          | offspring            |                  | Family               | In-progress    |
| NRG1      | Neuregulin 1   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NRG2      | Neuregulin 2   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| NRN1      | neuritin 1   | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| NRXN2     | neurexin 2   | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| NTN4      | netrin 4   | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| NTRK2     | neurotrophic tyrosine kinase, receptor, type 2             | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| OB1       | Obesity  | Offspring and Cohort | 3291             | Unrelated and Family | Complete       |
| OPCML     | Opioid binding protein. Cell adhesion molecule             | Offspring and Cohort | 1441             | Family               | In-progress    |
| OPRM1     | Opioid receptor  | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| OR8D2     | Olfactory receptor gene cluster                            | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| OSF-2     | osteoblast specific factor 2 (fasciilin I-like)            | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| OTOG      | Otogelin   | Offspring            | 1920             | Unrelated            | In-progress    |
| PACE4     |  |                      |                  |                      | In-progress    |
| PAI-1     | Plasminogen activator inhibitor, type 1                    | Offspring            | 2096             | Unrelated and Family | Complete       |
| PAI-2     | Plasminogen activator inhibitor, type II (arginine-serpin) | Offspring            | 2096             | Unrelated and Family | In-progress    |
| PAK1      | Human p21-activated protein kinase                         | Offspring            | 1920             | Unrelated            | In-progress    |
| PAX2      | paired box gene 2  | Offspring            |                  | Family               | In-progress    |
| PCSK7     | Proprotein convertase subtilisin/ kexin type 7             | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| PCTP      | phosphatidylcholine transfer protein                       | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| PECAM1    | Platelet/endothelial cell adhesion molecule (CD31 antigen) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PEX3      | Peroxisomal biogenesis factor 3                            | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| PHX 1015  |  | Offspring and Cohort | 1441             | Family               | In-progress    |
| PHX 1029  |  | Offspring and Cohort | 1441             | Family               | In-progress    |
| PHX 1032  |  | Offspring and Cohort | 1441             | Family               | In-progress    |

| Gene Name | Gene Description   | FHS Sample           | Estimated Number | Unrelated or Family  | Project Status |
|-----------|--|----------------------|------------------|----------------------|----------------|
| PHX 1063  |  | Offspring and Cohort | 1441             | Family               | In-progress    |
| PHX 1074  |  | Offspring and Cohort | 1441             | Family               | In-progress    |
| PHX 1140  |  | Offspring and Cohort | 1441             | Family               | In-progress    |
| PHX 1238  |  | Offspring and Cohort | 1441             | Family               | In-progress    |
| PHX 1347  |  | Offspring and Cohort | 1441             | Family               | In-progress    |
| PHX 1492  |  | Offspring and Cohort | 1441             | Family               | In-progress    |
| PHX 988   |  | Offspring and Cohort | 1441             | Family               | In-progress    |
| PHX 995   |  | Offspring and Cohort | 1441             | Family               | In-progress    |
| PHX 995   |  | Offspring and Cohort | 1441             | Family               | In-progress    |
| PHX 996   |  | Offspring and Cohort | 1441             | Family               | In-progress    |
| PIK3C2A   | Phosphoinositide-3-kinase, class 2, alpha polypeptide                    | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PIK3C2B   | Phosphoinositide-3-kinase, class 2, beta polypeptide                     | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PIK3C2G   | Phosphoinositide-3-kinase, class 2, gamma polypeptide                    | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PIK3C3    | Phosphoinositide-3-kinase, class 3                                       | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PIK3CA    | Phosphoinositide-3-kinase, catalytic, alpha polypeptide                  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PIK3CB    | Phosphoinositide-3-kinase, catalytic, beta polypeptide                   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PIK3CD    | Phosphoinositide-3-kinase, catalytic, delta polypeptide                  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PIK3CG    | Phosphoinositide-3-kinase, catalytic, gamma polypeptide                  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PIK3R     | Phosphoinositide-3-kinase, regulatory                                    | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PIK3R1    | phosphoinositide-3-kinase, regulatory subunit, polypeptide 1 (p85 alpha) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PIK3R2    | Phosphoinositide-3-kinase, regulatory subunit, polypeptide 2 (p85 beta)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PIK3R3    | Phosphoinositide-3-kinase, regulatory subunit, polypeptide 3 (p55 gamma) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PIP5K1A   |  |                      |                  |                      | Complete       |
| PLAGL1    | pleiomorphic adenoma gene-like 1   | related family       | 1441             | Family               | In-progress    |
| PLAT      | Plasminogen activator, tissue  | Offspring            | 2096             | Unrelated and Family | In-progress    |

| Gene Name | Gene Description  | FHS Sample           | Estimated Number | Unrelated or Family  | Project Status |
|-----------|---|----------------------|------------------|----------------------|----------------|
| PLAU      | urokinase plasminogen activator   | Offspring and Cohort | 1888 & 1441      | Unrelated and Family | In-progress    |
| PLD2      | phospholipase D2  | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| PLG       | plasminogen   | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| PLN       | phospholamban   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PLOD      | dioxygenase (lysine hydroxylase, Ehlers-Danlos syndrome type IV)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PNMT      | Phenylethanolamine N-methyltransferase  | Offspring and Cohort | 1866 & 1441      | Unrelated and Family | In-progress    |
| PON1      | Paraoxonase 1   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PPARA     |   |                      |                  |                      | In-progress    |
| PPARD     | PAR delta   | Offspring            | 1888             | Unrelated            | In-progress    |
| PPARG     | Peroxisome proliferative activated receptor, gamma  | Offspring            |                  | Unrelated and Family | Complete       |
| PPARG     | Peroxisome proliferative activated receptor, gamma  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PPARGC1   | PPAR gamma, coactivator 1   | Offspring            | 1888             | Unrelated            | In-progress    |
| PPP1R1B   | protein phosphatase 1, regulatory (inhibitor) subunit 1B  | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| PPP3CA    | Protein phosphatase 3 (formerly 2B), catalytic subunit, alpha isoform (calcineurin A alpha)             | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PPP3CB    | Protein phosphatase 3 (formerly 2B), catalytic subunit, beta isoform (calcineurin A beta)               | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PPP3CC    | protein phosphatase 3 (formerly 2B), catalytic subunit, gamma isoform (calcineurin A gamma)             | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PPP3R1    | Protein phosphatase 3 (formerly 2B), regulatory subunit B, 19kDa, alpha isoform (calcineurin B, type I) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PRG1      | proteoglycan 1, secretory granule   | Offspring and Cohort | 1888 & 1441      | Unrelated and Family | In-progress    |
| PRKAA1    | Protein kinase, AMP-activated, alpha 1 subunit  | Offspring            | 1888             | Unrelated            | In-progress    |
| PRKACA    | protein kinase, cAMP-dependent, catalytic, alpha  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PRKACB    | protein kinase, cAMP-dependent, catalytic, beta   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |

| Gene Name          | Gene Description   | FHS Sample           | Estimated Number | Unrelated or Family  | Project Status |
|--------------------|--|----------------------|------------------|----------------------|----------------|
| PRKACG             | protein kinase, cAMP-dependent, catalytic, gamma   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PRKAG2             | protein kinase, AMP-activated, gamma 2 non-catalytic subunit                               | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PRKAR1A            | Protein kinase, cAMP-dependent, regulatory, type I, alpha (tissue specific extinguisher 1) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PRKAR1B            | Protein kinase, cAMP-dependent, regulatory, type I, beta                                   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PRKAR2A            | Protein kinase, cAMP-dependent, regulatory, type II, alpha                                 | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PRKAR2B            | Protein kinase, cAMP-dependent, regulatory, type II, beta                                  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PRKCB1             | Protein kinase C, beta 1   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PRKGI LocusID 5592 | Protein kinase, cGMP-dependent, type 1   | Offspring            | 1800             | Unrelated            | In-progress    |
| PROC               | Protein C (inactivator of coagulation factors Va and VIIIa)                                | Offspring            | 2096             | Unrelated and Family | In-progress    |
| PROS1              | Protein S (alpha)  | Offspring            | 2096             | Unrelated and Family | In-progress    |
| PSMD4              |  |                      |                  |                      | Complete       |
| PTGIR              | prostaglandin 12 (prostacyclin) receptor (IP)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PTGIS              | prostaglandin 12 (prostacyclin) synthase   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PTPN11             | protein tyrosine phosphatase, non-receptor type 11 (Noonan syndrome 1)                     | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| PXN                | paxillin   |                      |                  |                      | In-progress    |
| RAC1               | Ras-related C3 botulinum toxin substrate 1   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| RAET1L             | Renioic acid early transcript 1  | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| RAF1               | v-raf-1 murine leukemia viral oncogene homolog 1   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| RAGE               | Renal tumor antigen  | Offspring            | 1888             | Unrelated            | Complete       |
| RE2                | G-protein coupled receptor   | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| RELA               | Transcription factor p65 (Nuclear factor NF-kappa-B p65 subunit)                           | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |

| Gene Name          | Gene Description   | FHS Sample           | Estimated Number | Unrelated or Family  | Project Status |
|--------------------|--|----------------------|------------------|----------------------|----------------|
| REN                | Renin  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| RGS2 LocusID 5997  | Regulator of G-protein signaling 2   | Offspring            | 1800             | Unrelated            | In-progress    |
| RIPK1              | Receptor-interacting serine/threonine protein kinase 1 (Serine/threonine protein kinase RIP, or RIPK1) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| ROCK1 LocusID 6093 | Rho-associated, coiled-coil containing protein kinase 1  | Offspring            | 1800             | Unrelated            | In-progress    |
| ROCK2 LocusID 9475 | Rho-associated, coiled-coil containing protein kinase 2  | Offspring            | 1800             | Unrelated            | In-progress    |
| ROMK               | Potassium inwardly-rectifying channel ?  | Offspring            |                  | Unrelated and Family | In-progress    |
| RUNX2              | Runt-related transcription factor 2  | Offspring            | 1888             | Unrelated            | In-progress    |
| RYR2               | ryanodine receptor 2 (cardiac)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| S100A11            | S100 calcium binding protein A11 (calgizzarin)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| S100A6             | S100 Calcium binding protein A6 (calcyclin)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| SARCOSIN           | sarcosin   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| SC5DL              | Sterol C5 desaturase like  | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| SC5DL              | Sterol C5 desturase  | Offspring and Cohort | 1441             | Family               | In-progress    |
| SCARB1             | Scavenger receptor class B member 1  | Offspring            | 2650             | Unrelated            | Complete       |
| SCN3B              | Voltage gated sodium channel beta-3subunit   | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| SCN5A (LQT 3)      | long QT syndrome   |                      |                  | Unrelated            | Complete       |
| SCNN1A             | Sodium channel   | Offspring and Cohort | 3982             | Unrelated and Family | Complete       |
| SCYA11             | Eotaxin  | Offspring            | 1888             | Unrelated            | In-progress    |
| SCYA11             | Chemokine (C-C motif) ligand 11  | Offspring            | 1888             | Unrelated            | In-progress    |
| SCYA2              | Monocyte chemotactic protein-1   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| SCYA5              | RANTES   | Offspring            | 1852             | Unrelated            | Complete       |
| SCYA7              | Chemokine (C-C motif) ligand 7   | Offspring            | 1888             | Unrelated            | In-progress    |
| SCYA8              | Chemokine (C-C motif) ligand 8   | Offspring            | 1888             | Unrelated            | In-progress    |
| SDF1               | Stromal Cell-Derived Factor 1  | Offspring            | 1851             | Unrelated            | Complete       |

| Gene Name | Gene Description   | FHS Sample           | Estimated Number | Unrelated or Family  | Project Status |
|-----------|--|----------------------|------------------|----------------------|----------------|
| SELENBP1  |  |                      |                  |                      | Complete       |
| SELL      | Selectin L (lymphocyte adhesion molecule 1)  | Offspring            | 2096             | Unrelated and Family | In-progress    |
| SELP      | Selectin P (granule membrane protein 140kDa, antigen CD62)   | Offspring            | 2096             | Unrelated and Family | In-progress    |
| SELPLG    | Selectin P ligand  | Offspring            | 2096             | Unrelated and Family | In-progress    |
| SERINA3   | serine (or cysteine) proteinase inhibitor, clade A, member 3   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| SERPINA8  | Angiotensinogen (AGT)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| SERPINE1  | serine (or cysteine) proteinase inhibitor, clade E, member 1   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| SERPINE1  | Serine (or cysteine) proteinase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1 | Offspring and Cohort | 3291             | Unrelated and Family | Complete       |
| SERPINH1  | serine (or cysteine) proteinase inhibitor, clade H, member 1   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| SFTP B    | Surfactant Protein B   | Offspring            | 1888             | Unrelated            | In-progress    |
| SFTP D    | Surfactant Protein D   | Offspring            | 1888             | Unrelated            | In-progress    |
| SGCA      | sarcoglycan, alpha (50kD dystrophin-associated glycoprotein)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| SGCB      | sarcoglycan, beta (43kD dystrophin-associated glycoprotein)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| SGCD      | sarcoglycan, delta (35kD dystrophin-associated glycoprotein)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| SGCE      | sarcoglycan epsilon  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| SGCG      | sarcoglycan, gamma (35kD dystrophin-associated glycoprotein)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| SGK       | Serum/glucocorticoid regulated kinase  | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| SHC3      | neuronal Shc   | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| SLC12A1   | Solute carrier family 12   | Offspring            | 1819             | Unrelated            | In-progress    |
| SLC22A3   | Solute carrier 22 (extraneuronal monoamine transporter)  | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| SLC2A12   | Solute Carrier Family 2 (facilitated glucose transporter)  | Offspring and Cohort |                  | Family and Unrelated | In-progress    |

| Gene Name | Gene Description   | FHS Sample           | Estimated Number | Unrelated or Family  | Project Status |
|-----------|--|----------------------|------------------|----------------------|----------------|
| SLC6A5    | solute carrier family 6, member 5  | offspring and family | 1441 & 1863      | Unrelated and Family | In-progress    |
| SMOC 2    | Forced Vital Capacity study, FVC phenotype   |                      |                  |                      | Complete       |
| SOD1      | Superoxide dismutase 1, soluble  | Offspring and Cohort | 1888 & 1441      | Unrelated and Family | In-progress    |
| SOD2      | Superoxide dismutase 2   | Offspring            |                  |                      | Complete       |
| SOD2      | Superoxide dismutase 2, mitochondrial  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| SOD3      | Superoxide dismutase 3, extracellular  | Offspring and Cohort | 1888 & 1441      | Unrelated and Family | In-progress    |
| SORL1     | Sortilin related receptor containing LDLR class  | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| SPP1      | secreted phosphoprotein 1 (osteopontin, bone sialoprotein 1, early T-lymphocyte activation 1)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| SPP1      | Secreted phosphoprotein 1  | Offspring            | 1888             | Unrelated            | In-progress    |
| SPP1      | Secreted phosphoprotein 1  | Offspring            | 1888             | Unrelated            | In-progress    |
| SRC       | v-src sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (avian)                              | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| SRC1      | Steroid receptor coactivator 1   | Offspring            | 1888             | Unrelated            | In-progress    |
| SRF       | Serum response factor  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TACR1     | Tachykinin receptor 1  | Offspring            | 1888             | Unrelated            | In-progress    |
| TAGLN     | trangelin  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TAZ       | tafazzin (cardiomyopathy, dilated 3A (X-linked); endocardial fibroelastosis 2; Barth syndrome) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TBX5q     | T-box 5  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TECTA     | Tectorin alpha   | Offspring            | 1920             | Unrelated            | In-progress    |
| TEK       | TEK tyrosine kinase, endothelial   | Offspring            |                  |                      | Complete       |
| TFAM      | transcription factor A, mitochondrial  | offspring            |                  | Family               | In-progress    |
| TGFB1     | Transforming growth factor, beta 1   | Offspring            |                  |                      | Complete       |
| TGFB3     | Transforming growth factor, beta 3   | Offspring            |                  |                      | Complete       |
| THBD      | Thrombomodulin   | Offspring            | 1888             | Unrelated            | In-progress    |
| THBS1     | Thrombospondin 1   | Offspring            |                  | Unrelated and Family | Complete       |
| THBS1     | Thrombospondin 1   | Offspring            | 2096             | Unrelated and Family | In-progress    |
| THBS1     | Thrombospondin 1   | Offspring            | 1888             | Unrelated            | In-progress    |
| THBS4     | Thrombospondin 4   | Offspring            | 2096             | Unrelated and Family | In-progress    |

| Gene Name | Gene Description   | FHS Sample           | Estimated Number | Unrelated or Family  | Project Status |
|-----------|--|----------------------|------------------|----------------------|----------------|
| TIE       | Tyrosine kinase with immunoglobulin  | Offspring            | 1888             | Unrelated            | In-progress    |
| TIMP1     | tissue inhibitor of metalloproteinase 1 (erythroid potentiating activity, collagenase inhibitor) | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TIRAP     | Toll-interleukin 1 receptor (TIR)  | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| TMEFF2    | Transmembrane Protein  | Offspring            | 1888             | Unrelated            | In-progress    |
| TMOD3     | tropomodulin 3 (ubiquitous)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TMOD4     | tropomodulin 4 (muscle)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TMPRS5    | Transmembrane protease serine 5  | Offspring and Cohort | 1441             | Family               | In-progress    |
| TNF       | Tumor Necrosis Factor Alpha (TNF)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TNF       | Tumor necrosis factor  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TNFAIP2   | Tumor necrosis factor, alpha-induced protein 2 (A20)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TNFRSF11B | Tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin)                         | Offspring            | 1888             | Unrelated            | In-progress    |
| TNFRSF1A  | Tumor necrosis factor receptor superfamily member 1A precursor (TNF-R1, or p55)                  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TNF-RSF1B | TNF receptor superfamily, member 1B  | Offspring            | 1888             | Unrelated            | In-progress    |
| TNNI3     | Troponin I, cardiac  | Offspring            | 1888 & 81        | Unrelated and Family | In-progress    |
| TNNI3     | troponin I, cardiac  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TNNT2     | Troponin T2, cardiac   | Offspring            | 1888 & 81        | Unrelated and Family | In-progress    |
| TNNT2     | troponin T2, cardiac   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TPH1      | tryptophan hydroxylase 1 (tryptophan 5-monooxygenase)  | offspring and family | 1441 & 1863      | Unrelated and Family | In-progress    |
| TPM1      | Tropomyosin 1, alpha   | Offspring            | 1888 & 81        | Unrelated and Family | In-progress    |
| TPM1      | tropomyosin 1 (alpha)  | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TRADD     | TNFRSF1A-associated via death domain (TRADD)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TRAF2     | TNF receptor-associated factor 2 (TRAF2)   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |

| Gene Name | Gene Description                                     | FHS Sample           | Estimated Number | Unrelated or Family  | Project Status |
|-----------|--|----------------------|------------------|----------------------|----------------|
| TRAF4     | TNF receptor-associated factor 4                     | Offspring and Cohort | 1441 & 1863      | Unrelated and Family | In-progress    |
| TREH      | Trehalase  | Offspring and Cohort | 1441             | Family               | In-progress    |
| TSP2      | Thrombospondin 2                                     | Offspring            | 1888             | Unrelated            | In-progress    |
| TUBB2     | tubulin, beta, 2                                     | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TUBB5     | tubulin, beta, 5                                     | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| TUSP      | Tubby superfamily protein                            | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| UCP2      | uncoupling protein 2 (mitochondrial, proton carrier) | Offspring and Family | 1441 & 1863      | Unrelated and Family | In-progress    |
| UCP3      | uncoupling protein 3 (mitochondrial, proton carrier) | offspring and family | 1441 & 1863      | Unrelated and Family | In-progress    |
| UGT1A1    | Uridine diphosphate glycosyltransferase 1            | Offspring and Cohort | 1441 & 1866      | Unrelated and Family | In-progress    |
| UTS2      |  |                      |                  |                      | In-progress    |
| VDR       | Vitamin D Receptor                                   | Cohort               | 283              | Unrelated            | Complete       |
| VEGF      | Vascular endothelial growth factor                   | Offspring            | 1888 & 1441      | Unrelated and Family | In-progress    |
| VEGFC     |  |                      |                  |                      | In-progress    |
| VIP       | Vasoactive intestinal peptide                        | Offspring and Cohort |                  | Family and Unrelated | In-progress    |
| VNN1      | vanin 1  | related family       | 1400             | Family               | In-progress    |
| VNN2      | vanin 2  | related family       | 1400             | Family               | In-progress    |
| VNN3      | vanin 3  | related family       | 1400             | Family               | In-progress    |
| VTN       | Vitronectin  | Offspring            |                  |                      | Complete       |
| VWF       | von Willebrand factor                                | Offspring            | 2096             | Unrelated and Family | In-progress    |
| ZNF145    | Zinc finger protein 145                              | Offspring and Cohort | 1441             | Family               | In-progress    |
|           | All genes on Chr. 7q from 7q21.3 to 7qter            | Offspring and Gen3   | 4000             | Family               | In-progress    |